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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,681	11/25/2003	Matthew B. Shoemaker	TI-35728	8351
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EXAMINER				
DAO, MINH D				
ART UNIT		PAPER NUMBER		
2618				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

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Office Action Summary**Application No.**

10/722,681

Applicant(s)

SHOEMAKE ET AL.

Examiner

MINH D. DAO

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 04/11/08 have been fully considered but they are not persuasive.
2. Regarding claim 8, Applicant, on pages 6-7, argues that Shoobridge does not teach the newly added limitation "until the transmission of the second signal packet is complete". This limitation is taught by Awater (see col. 8, lines 11-20). In addition, applicant's arguments are against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awater et al. (US 7,046,649) in view of Shoobridge et al. (US 6,326,926).

Regarding claim 1, Awater teaches a dual platform communication controller for use with a wireless communication system (see fig. 1), comprising: a signal interpreter coupled to said wireless communication system and configured to recognize a first signal packet based on a first communication standard and a second signal packet based on a second communication standard (see figs. 1 and 2; col. 3, line 10 to col. 4, line 60); and a traffic manager coupled to said signal interpreter and configured to provide a deterministic time-sharing between said first and second signal packets within said wireless communication system until transmission of the second packet is complete (see figs. 1 and 2; col. 5, line 15 to col. 6, line 57. Also see col. 8, lines 11-20). The control means and the Interoperability device 106 of Awater read on the signal interpreter and the traffic manager of the present invention. However, Awater does not disclose prohibit interrupting a transmission of the second signal packet when the signal interpreter recognizes the first signal packet. Shoobridge, in an analogous art, teaches a system is provided having a first antenna arrangement tuned to communicate within a first radiation pattern and a second antenna arrangement tuned to communicate within a second radiation pattern. In a preferred aspect of the invention, the first radiation path has an inverted conical shape and the second radiation path has a disk shape. The first radiation path is employed to communicate to access points communicating according to the IEEE 802.11 standard. The second radiation path is employed to communicate to access points communicating according to the Bluetooth standard. A guard band separates the first radiation path from the second radiation path. The first and second

antenna arrangement can be coupled to the same radio device to concurrently allow the Bluetooth and the IEEE 802.11 communication while preventing interference between the two systems due to the use of the guard band (see abstract; figs. 5,6,9 and their associated passages; also see col. 1, line 11 to col. 4, line 6; col. 8, lines 33-56; col. 9, lines 24-46). Therefore, it would have been obvious to one of ordinary skilled in the art at the time of the invention was made to provide the above teaching of Shooobridge to Awater in order for the combined system to concurrently allow communication of two collocated Bluetooth and IEEE 802.11 systems while avoiding internal interference and therefore maintaining efficiency of the collocated systems as taught by Shooobridge.

Regarding claim 2, the combination of Awater and Shooobridge teaches the controller as recited in claim 1 wherein the first communication standard is configured to be IEEE 802.11 (see Awater, figs. 1 and 2; col. 3, line 10 to col. 4, line 60).

Regarding claim 3, the combination of Awater and Shooobridge teaches the controller as recited in claim 1 wherein said second communication standard is configured to be Bluetooth (see Awater, figs. 1 and 2; col. 3, line 10 to col. 4, line 60).

Regarding claim 4, the combination of Awater and Shooobridge teaches the controller as recited in claim 1 wherein said traffic manager is configured to provide said deterministic time-sharing between said first and second signal packets based on a real-time requirement (see Awater, figs. 1 and 2; col. 3, line 10 to col. 4, line 60).

Regarding claim 5, the combination of Awater and Shooobridge teaches the controller as recited in claim 1 wherein said traffic manager is configured to provide said deterministic time-sharing between said first and second signal packets based on a period of time (see Awater, figs. 1 and 2; col. 3, line 10 to col. 4, line 60).

Regarding claim 6, the combination of Awater and Shooobridge teaches the controller as recited in claim 1 wherein said traffic manager is configured to provide said deterministic time-sharing between said first and second signal packets by inhibiting a transmission capability of at least one of said first and second signal packets (see Awater, figs. 1 and 2; col. 3, line 10 to col. 4, line 60; also see col. 5, line 15 to col. 6, line 57).

Regarding claim 7, the combination of Awater and Shooobridge teaches that the controller as recited in claim 1 wherein said traffic manager is further configured to operate in a default state having a listening mode and a standby mode (see col. 1, line 51 to col. 2, line 13). Sine Awater teaches a CSMA/CA (Carrier Sense Multiple Access with the use of Collision Avoidance) that is well known in the art to "listen-before-talk", therefore this teaching of Awater obviously reads on the above limitation of the present invention.

Regarding claim 8, the rejection of claim 1 is herein incorporated. In addition, Awater also teaches "determining presence of a request to transmit said first signal packet"; "until said transmission of said second signal packet is complete" (see col. 8, lines 11-20).

Regarding claim 9, the claim includes the limitations as that of claim 2, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 2.

Regarding claim 10, the claim includes the limitations as that of claim 3, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 3.

Regarding claim 11, the claim includes the limitations as that of claim 4, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 4.

Regarding claim 12, the claim includes the limitations as that of claim 5, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 5.

Regarding claim 13, the claim includes the limitations as that of claim 6, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 6.

Regarding claim 14, the claim includes the limitations as that of claim 7, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 7.

Regarding claim 15, the claim includes the limitations as that of claim 1, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 1.

Regarding claim 16, the claim includes the limitations as that of claim 2, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 2.

Regarding claim 17, the combination of Awater and Shoobridge teaches a traffic manager is configured to prohibit interrupting the transmission by maintaining assertion of a Bluetooth transmission bus for a designated period of time after recognizing said first signal packet (see Shoobridge, abstract; figs. 5,6,9 and their associated passages; also see col. 1, line 11 to col. 4, line 6; col. 8, lines 33-56; col. 9, lines 24-46. Also see Awater, col. 8, lines 11-20).

Regarding claim 18, the combination of Awater and Shoobridge teaches a traffic manager interrupts communication traffic of said first and second signal packets when receiving notification of a priority Bluetooth transmission (see Awater (see figs. 1 and 2; col. 5, line 15 to col. 6, line 57).

Regarding claim 19, the claim includes the limitations as that of claim 5, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 5.

Regarding claim 20, the claim includes the limitations as that of claim 6, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 6.

Regarding claim 21, the claim includes the limitations as that of claim 7, and therefore is interpreted and rejected for the reason set forth in the rejection of claim 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is (571)272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH DAO
/MINH D DAO/
Examiner, Art Unit 2618